

CLAIMS

1. An optical waveguide device comprising a substrate and a supporting body for supporting said substrate, said substrate having a main body made of an electrooptic material and one and the other main faces, an optical waveguide and an electrode provided on the side of said one main face of said main body;

wherein said supporting body is joined with said main body on the side of the other main face, said electrode comprises a feedthrough portion, and said device further comprises a low dielectric portion provided under said feedthrough portion and between the other main face of said main body and said supporting body.

2. The device of claim 1, wherein at least a part of said low dielectric portion is composed of a material having a dielectric constant lower than that of said electrooptic material.

3. The device of claim 1, wherein a part of the other main face under said optical waveguide faces a space or a solid material of a low dielectric constant.

4. The device of claim 1, wherein said low dielectric portion comprises a joining layer joining said supporting body and the other main face of said main body.

5. The device of claim 4, wherein said joining layer has a thickness of 5 micrometer or larger.

6. The device of claim 1, wherein said low dielectric portion comprises a resin sheet between said supporting body and the other main face of said main body.

7. The device of claim 6, wherein said resin sheet has a thickness of

5 micrometer or more.

8. The device of claim 7, wherein said main body has a thickness of 100 micrometer or more in a region of said optical waveguide.

9. The device of claim 1, wherein a recess is formed on the side of the other main face of said main body.

10. The device of claim 9, wherein said main body comprises a first thinner portion facing said recess and a second thinner portion facing said recess and having a thickness smaller than that of said first thinner portion, and said optical waveguide is provided in said first thinner portion.

11. The device of claim 1, further comprising a conductive layer on the surface of said supporting body at least under said feedthrough portion.

12. A traveling waveguide type optical modulator comprising the device of claim 1, wherein said electrode applies a voltage for modulating light propagating through said optical waveguide.